

## § 11.82

sufficient detail to evaluate the possible alternatives for the purpose of selecting the appropriate alternative to use in determining the cost of baseline restoration, rehabilitation, replacement, and/or acquisition of equivalent resources, and, where relevant, the compensable value.

(b) The authorized official shall use the guidance in §§11.82, 11.83, and 11.84 of this part to develop the Restoration and Compensation Determination Plan.

(c) The authorized official shall list the methodologies he expects to use to determine the costs of all actions considered within the selected alternative and, where relevant, the compensable value of the lost services through the recovery period associated with the selected alternative. The methodologies to use in determining costs and compensable value are described in §11.83 of this part.

(d)(1) The Restoration and Compensation Determination Plan shall be part of the Assessment Plan developed in subpart B of this part. If existing data are not sufficient to develop the Restoration and Compensation Determination Plan at the time that the overall Assessment Plan is made available for public review and comment, the Restoration and Compensation Determination Plan may be developed later, after the completion of the Injury Determination or Quantification phases.

(2) If the Restoration and Compensation Determination Plan is prepared later than the Assessment Plan, it shall be made available separately for public review by any identified potentially responsible party, other natural resource trustees, other affected Federal or State agencies or Indian tribes, and any other interested members of the public for a period of no less than 30 calendar days. Reasonable extensions may be granted as appropriate.

(3) Comments received from any identified potentially responsible party, other natural resource trustees, other affected Federal or State agencies or Indian tribes, or any other interested members of the public, together with responses to those comments, shall be included as part of the Report of Assessment, described in §11.90 of this part.

## 43 CFR Subtitle A (10–1–11 Edition)

(4) Appropriate public review of the plan must be completed before the authorized official performs the methodologies listed in the Restoration and Compensation Determination Plan.

(e) The Restoration and Compensation Determination Plan may be expanded to incorporate requirements from procedures required under other portions of CERCLA or the CWA or from other Federal, State, or tribal laws applicable to restoration, rehabilitation, replacement, and/or acquisition of the equivalent of the injured resources or may be combined with other plans for related purposes, so long as the requirements of this section are fulfilled.

[59 FR 14283, Mar. 25, 1994, as amended at 73 FR 57266, Oct. 2, 2008]

### **§ 11.82 Damage determination phase—alternatives for restoration, rehabilitation, replacement, and/or acquisition of equivalent resources.**

(a) *Requirement.* The authorized official shall develop a reasonable number of possible alternatives for (i) the restoration or rehabilitation of the injured natural resources to a condition where they can provide the level of services available at baseline, or (ii) the replacement and/or acquisition of equivalent natural resources capable of providing such services. For each possible alternative developed, the authorized official will identify an action, or set of actions, to be taken singly or in combination by the trustee agency to achieve the baseline restoration, rehabilitation, replacement, and/or acquisition of equivalent natural resources. The authorized official shall then select from among the possible alternatives the alternative that he determines to be the most appropriate based on the guidance provided in this section.

(b) *Steps.* (1) The authorized official shall develop a reasonable number of possible alternatives that would restore, rehabilitate, replace, and/or acquire the equivalent of the injured resources. Each of the possible alternatives may, at the discretion of the authorized official, consist of actions, singly or in combination, that would achieve those purposes.

(i) Restoration or rehabilitation actions are those actions undertaken to return injured resources to their baseline condition, as measured in terms of the physical, chemical, or biological properties that the injured resources would have exhibited or the services that would have been provided by those resources had the discharge of oil or release of the hazardous substance under investigation not occurred. Such actions would be in addition to response actions completed or anticipated pursuant to the National Contingency Plan (NCP).

(ii) Replacement or acquisition of the equivalent means the substitution for injured resources with resources that provide the same or substantially similar services, when such substitutions are in addition to any substitutions made or anticipated as part of response actions and when such substitutions exceed the level of response actions determined appropriate to the site pursuant to the NCP.

(iii) Possible alternatives are limited to those actions that (i) restore or rehabilitate the injured natural resources to a condition where they can provide the level of services available at baseline, or (ii) replace and/or acquire equivalent natural resources capable of providing such services.

(2) *Services provided by the resources.*

(i) In developing each of the possible alternatives, the authorized official shall list the proposed actions that would restore, rehabilitate, replace, and/or acquire the equivalent of the services provided by the injured natural resources that have been lost, and the period of time over which these services would continue to be lost.

(ii) The authorized official shall identify services previously provided by the resources in their baseline condition in accordance with § 11.72 of this part and compare those services with services now provided by the injured resources, that is, the with-a-discharge-or-release condition. All estimates of the with-a-discharge-or-release condition shall incorporate consideration of the ability of the resources to recover as determined in § 11.73 of this part.

(c) *Range of possible alternatives.* (1) The possible alternatives considered by the authorized official that return the

injured resources to their baseline level of services could range from intensive action on the part of the authorized official to return the various resources and services provided by those resources to baseline conditions as quickly as possible, to natural recovery with minimal management actions. Possible alternatives within this range could reflect varying rates of recovery, combinations of management actions, and needs for resource replacements or acquisitions.

(2) An alternative considering natural recovery with minimal management actions, based upon the "No Action-Natural Recovery" determination made in § 11.73(a)(1) of this part, shall be one of the possible alternatives considered.

(d) *Factors to consider when selecting the alternative to pursue.* When selecting the alternative to pursue, the authorized official shall evaluate each of the possible alternatives based on all relevant considerations, including the following factors:

(1) Technical feasibility, as that term is used in this part.

(2) The relationship of the expected costs of the proposed actions to the expected benefits from the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources.

(3) Cost-effectiveness, as that term is used in this part.

(4) The results of any actual or planned response actions.

(5) Potential for additional injury resulting from the proposed actions, including long-term and indirect impacts, to the injured resources or other resources.

(6) The natural recovery period determined in § 11.73(a)(1) of this part.

(7) Ability of the resources to recover with or without alternative actions.

(8) Potential effects of the action on human health and safety.

(9) Consistency with relevant Federal, State, and tribal policies.

(10) Compliance with applicable Federal, State, and tribal laws.

(e) A Federal authorized official shall not select an alternative that requires

## § 11.83

acquisition of land for Federal management unless the Federal authorized official determines that restoration, rehabilitation, and/or other replacement of the injured resources is not possible.

[59 FR 14284, Mar. 25, 1994, as amended at 73 FR 57266, Oct. 2, 2008; 73 FR 65274, Nov. 3, 2008]

### § 11.83 Damage determination phase—use value methodologies.

(a) *General.* (1) This section contains guidance and methodologies for determining: The costs of the selected alternative for (i) the restoration or rehabilitation of the injured natural resources to a condition where they can provide the level of services available at baseline, or (ii) the replacement and/or acquisition of equivalent natural resources capable of providing such services; and the compensable value of the services lost to the public through the completion of the baseline restoration, rehabilitation, replacement, and/or acquisition of equivalent natural resources.

(2)(i) The authorized official shall select among the cost estimating and valuation methodologies set forth in this section, or methodologies that meet the acceptance criterion of either paragraph (b)(3) or (c)(3) of this section.

(ii) The authorized official shall define the objectives to be achieved by the application of the methodologies.

(iii) The authorized official shall follow the guidance provided in this section for choosing among the methodologies that will be used in the Damage Determination phase.

(iv) The authorized official shall describe his selection of methodologies and objectives in the Restoration and Compensation Determination Plan.

(3) The authorized official shall determine that the following criteria have been met when choosing among the cost estimating and valuation methodologies. The authorized official shall document this determination in the Report of the Assessment. Only those methodologies shall be chosen:

(i) That are feasible and reliable for a particular incident and type of damage to be measured.

(ii) That can be performed at a reasonable cost, as that term is used in this part.

## 43 CFR Subtitle A (10–1–11 Edition)

(iii) That avoid double counting or that allow any double counting to be estimated and eliminated in the final damage calculation.

(iv) That are cost-effective, as that term is used in this part.

(4) Factors that may be considered by trustees to evaluate the feasibility and reliability of methodologies can include:

(i) Is the methodology capable of providing information of use in determining the restoration cost or compensable value appropriate for a particular natural resource injury?

(ii) Does the methodology address the particular natural resource injury and associated service loss in light of the nature, degree, and spatial and temporal extent of the injury?

(iii) Has the methodology been subject to peer review, either through publication or otherwise?

(iv) Does the methodology enjoy general or widespread acceptance by experts in the field?

(v) Is the methodology subject to standards governing its application?

(vi) Are methodological inputs and assumptions supported by a clearly articulated rationale?

(vii) Are cutting edge methodologies tested or analyzed sufficiently so as to be reasonably reliable under the circumstances?

(5) All of the above factors may not be applicable to every case, and other factors may be considered to evaluate feasibility and reliability. The authorized official shall document any consideration of factors deemed applicable in the Report of Assessment.

(b) *Costs of restoration, rehabilitation, replacement, and/or acquisition of equivalent resources.* (1) Costs for restoration, rehabilitation, replacement, and/or acquisition of equivalent resources are the amount of money determined by the authorized official as necessary to complete all actions identified in the selected alternative for restoration, rehabilitation, replacement, and/or acquisition of equivalent resources, as selected in the Restoration and Compensation Determination Plan of § 11.81 of this part. Such costs shall include direct and indirect costs, consistent with the provisions of this section.